CLAIMS

1. In a wireless communication system, a method comprising:

   determining a transmission configuration for a first channel as a function of Peak-to-Average Ratio (PAR) on the first channel, the transmission configuration including a spreading code and a modulation path;

   if the spreading code if used by another channel in the wireless communication system, updating the transmission configuration as a function of PAR; and

   applying the transmission configuration to the first channel.

2. The method as in claim 1, wherein the modulation path is selected from an In-phase (I) branch and a Quadrature (Q) branch.

3. The method as in claim 2, wherein the first channel is a dedicated physical channel on an uplink in the wireless communication system.

4. The method as in claim 3, wherein the wireless communication system includes a plurality of dedicated data channels and at least one dedicated control channels.

5. A wireless communication apparatus, comprising:

   means for determining a transmission configuration for a first channel as a function of Peak-to-Average Ratio (PAR) on the first channel, the transmission configuration including a spreading code and a modulation path;

   means for updating the transmission configuration as a function of PAR if the spreading code if used by another channel in the wireless communication system; and

   means for applying the transmission configuration to the first channel.

6. A wireless apparatus, comprising:

 modulation pair selection unit for determining a modulation pair based on

  Peak-to-Average Ratio (PAR); and

 selector coupled to the modulation pair selection unit, that selects a

  modulation path based on the modulation pair.